WAMC Drinking Water Asset Management Template

Please answer all questions. Not available can be used for an answer when necessary
Questions 8 and 9 are specific to underground pipe only. All other questions are systemwide

1. Name of Utility – Please identify the specific name of your utility as used by EGLE

2. Name of Responder – Please identify the name of the person filling out this survey

3. Title of Responder - Please identify the title/position of the person filling out this survey

4. Please provide your System's WSSN number.

5. Do you own or operate your own distribution system?
Yes
No

6. Do you supply water to, or receive water from another municipality? – Do you provide treatment/water to an outside municipality, i.e. a city owned treatment facility providing treatment to a neighboring township.
Yes
No

7. Are you part of a multi-jurisdictional system? – Please indicate if your system is part of an authority, 529 agreement, or inter municipal service agreement. Ie. you are part of a legally formed arrangement where decision making is shared.
Yes
No

8. Please indicate the total feet of pipe installed. – Pipe system length is the total length of the distribution or collection pipe network in a service area in feet. This includes mains of all diameters but does not include lateral service lines. Collection systems may convey both sanitary sewage and stormwater.
Enter Number

9. Please indicate the footage of pipe inventory that falls under each rating with 1 being the best condition and 5 being the worst. – This inventory may be actual or estimated. For example, you may have 10,000 feet of pipe in your system, 2000 feet of which is over 50 years old. You estimate the condition of those pipes to be “worst” or #5, so you would put 2000 in the Number 5 box.
1
2
3
4
5
ADD NOT AVAILABLE

*The rest of the survey asks questions that deal with the system as a whole in its entirety, not just the pipes, i.e. wastewater treatment system (treatment facility, collection system), water system (supply, storage, treatment, distribution), stormwater (collection, treatment).

10. Please indicate the replacement values of the following categories: - The replacement value of the asset is the cost to replace the asset after it has exhausted its' useful life. Obtaining costs for the asset replacement is not easy. In some cases, the utility will use an estimate based on best practices in other cases the utility may rely on consultant or manufacturer catalogs and sales representatives. These replacement values can be actual – meaning you have identified the total replacement cost of all assets, or can be an estimate. An answer of NA or NOT AVAILABLE is appropriate when the answer is unknown or Not Available

Distribution
Storage
Treatment
Supply

11. How many water main breaks occurred in your system last year?
Enter number or NA

LEVEL OF SERVICE AND PERFORMANCE

This section is used to determine an asset owner's progress in defining and establishing their desired Level of Service. Understanding the desired Level of Service will help to prioritize and characterize the system's assets; as well as how to manage finances to reach the Level of Service goals.

12. For which categories has your system established Level of Service goals – Check the categories/boxes that your system has performed a Level of Service analysis on.

Reliability – consistency, providing trouble free service over a long period of time
Responsiveness - measures the speed and quality at which your company provides customer service and communication.
Safety – measuring internal safety within the facility as well as external, outside the facility/general public
Capacity – the ability to deliver the service on a daily as well as maximum load situation
Environmental Impact - any change to the environment, whether adverse or beneficial, wholly or partially resulting from the utility's activities, products, or services.
Affordability – measuring the annual cost of service in relation to a percentage of median household income and user ability and willingness to pay.
Compliance – ability or inability to maintain regulatory standards

13. On a scale of 0-5, please indicate how far your system is toward reaching its Level of Service goals for each of the above listed categories. A zero/0 means your system has not yet developed Level of Service goals for that category. 1 means your system has developed Level of Service goals but no action has been taken. 2 means your system has developed Level of Service goals but limited action has been taken. 3 means your system is halfway towards meeting the Level of Service goals. 4 means your system has made significant progress in meeting the Level of Service goals. 5 means your system has reached the desired Level of Service goals and maintains that level. NA means that this information is NOT AVAILABLE.

Reliability	0	1	2	3	4	5	NA

Responsiveness	0	1	2	3	4	5	NA
Safety	0	1	2	3	4	5	NA
Capacity	0	1	2	3	4	5	NA
Environmental Impact	0	1	2	3	4	5	NA
Affordability	0	1	2	3	4	5	NA
Compliance	0	1	2	3	4	5	NA

14. Please rank the following impediments toward reaching your desired level of service (1 being Low impact, 5 being High impact.)

	0	1	2	3	4	5	NA
Staffing	0	1	2	3	4	5	NA
Limited Funds	0	1	2	3	4	5	NA
Other	0	1	2	3	4	5	NA

Other (please specify)

This section deals with criticality. Probability of Failure looks at how likely an asset will fail. Probability of Failure deals with a number of factors: asset age, condition of asset, failure history, historical knowledge, experiences with that type of asset in general, maintenance records, and knowledge regarding, all inter-related in determining the likelihood of fail.

The Assessing criticality requires an examination of the probability of failure and the consequence of failure as discussed above. The assets that have the greatest probability of failure and the greatest consequences associated with the failure will become assets that are the most critical. The table below is an example of assessing criticality.

Criticality or Business Risk analysis takes a look at Probability of Failure and Consequence of Failure to determine the importance of a particular asset to the utility as a whole. A Criticality or Business Risk analysis of different assets will reveal which asset has the highest criticality factor and therefore which asset would require the most attention either for repair or replacement.

15. Have you done a Probability of Failure analysis on your assets?
Yes
No
NA

16. Have you done a Consequence of Failure analysis on your assets?
Yes
No
NA

15. Have you done a Criticality/Business Risk analysis on your assets?
Yes
No
NA

CAPITAL IMPROVEMENT
This system deals with capital improvement efforts.

A long-term Capital Improvement Plan should look at the utility's needs for the future. Ideally, the planning period would be at least 20 years, with a minimum of 5 years. It is understood that the specific expenditures and needs of the utility in the latter years, say 15 to 20 years, are more speculative than the needs for the first 5 to 10 years, particularly the first 5 years. However, the inclusion of the needs for this longer time period will provide a better opportunity for the water system to plan for its capital needs. Capital improvement projects are projects which the utility has an extended period of time to plan for and are projects which usually cover high cost, non-recurring items.

18. What is the approximate amount of Capital Improvement project costs for the next five (5) years? - This number can be a specific number coming from a detailed CIP plan or an estimate
Enter Number or NA

19. What is the approximate amount of Capital Improvement project costs for the next twenty (20) years? - This number can be a specific number coming from a detailed CIP plan or an estimate
Enter Number or NA

COORDINATION
This section explores how municipalities are working with other asset owners

20. With what other utilities/jurisdictions do you have ongoing efforts for coordination? – Please identify those utilities/jurisdictions where you are coordinating activities, i.e. your wastewater utility is coordinating efforts with the road commission and natural gas company with the current sewer project.
County
Neighboring Jurisdiction
Utilities – these would be other utilities such as gas, communications, electric, roads
NOT APPLICABLE - No ongoing efforts for coordination
Other (please specify)

21. What activities are coordinated? - There are several different components to the wastewater system. Do you coordinate activities with certain components are with all components, i.e. do you only coordinate activities when replacing sewers
Water Main
Collection System
Storage
Treatment
NOT APPLICABLE - No ongoing efforts for coordination
Other (please specify)

22. For what activities do you have future coordination plans? - There are several different components to the wastewater system. Do you coordinate activities with certain components are with all components, i.e. do you only coordinate activities when replacing sewers
Water Main
Collection System
Storage
Treatment
NOT APPLICABLE - No ongoing efforts for coordination
Other (please specify)

23. Do you have proof of acceptance, certification, or adoption by the jurisdiction's governing body? – Do you have an official document that binds your public officials to the asset management plan?
Yes
No

Thank you for taking the time to complete this questionnaire.